

Teacher of Computing and Mathematics Candidate Brief



co-educational nursery school to sixth form

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An Introduction

Clifton High School is a forward-looking school set in beautiful surroundings in the heart of Clifton. We are a mid-sized, all-through, independent school of 600 pupils, educating boys and girls from 3-18 years. 'Realising Individual Brilliance' is central to our approach at Clifton High. We believe each child has unique talents and our aim is to nurture and celebrate the brilliance of all. Our approach to education is distinctive in that on transition into the Senior School, boys and girls are taught separately in core subjects. Research has shown, and our experience has borne out, that this gives our pupils the best environment in which to learn. At the same time our boys and girls benefit from having social interaction on a day-to-day basis which is crucial for their personal, social and emotional development. We call this the Diamond Edge Model of education.

Clifton High School is known for its strong pastoral and family ethos. Principally we are a school for parents who want their child's emotional and personal development to be given the same level of importance as their academic achievements. Parents comment on the excellent relationships between staff and pupils - relaxed but always respectful. The rapport, encouragement and support available to every single child, pupil and student create an atmosphere where children and young people can develop happily and progress successfully.



Academic success is extremely important to us at Clifton High School and we have a selective admissions policy. Typically, our students receive excellent results, and year on year the majority go on to secure their first choice of university. There is a firm belief, however, that there is more to school life than just good grades and we put as much emphasis on our pupils' development as on their achievement. Our pupils and young people want to extend themselves beyond the classroom to acquire new skills and develop character traits which will equip them for life. We support our boys and girls wholeheartedly as they embrace with conviction and enthusiasm the rich extra-curricular opportunities available to them. As a school, we believe that the privilege of excellent education brings with it responsibility and we send young people out into the world who are ready to make a real and positive contribution to society.

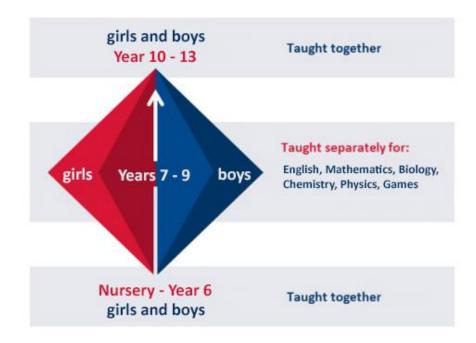
Four 'Houses' named after the School's founders, Percival, Pears, Wollaston and Winkworth, offer community structure across all ages. The majority of teaching is on one site with facilities including music technology and ICT suites, dance and theatre studio and hall with the latest audio-visual technology and, most recently, a new dedicated STEM room. The School has two senior computer laboratories and a junior computer room. Teaching rooms are equipped with interactive whiteboards and in many rooms, the latest interactive televisions and projectors. There are bespoke resources for learning and for play, including an environmental pond, eco garden, vegetable beds, outdoor classroom, fire-pit and mud kitchen. On-site sports facilities include swimming pool, climbing wall and gymnasium, strength and conditioning room, and outdoor multi use games area. At our nearby sports ground, Coombe Dingle, which is shared in partnership with the University of Bristol, there are international standard pitches, tracks and courts.

The Diamond Edge Model

Clifton High was the first school in the South West and is the only school in Bristol to follow the Diamond Edge Model of Education. Issues relating to gender and education have been debated for many years and it is widely accepted that boys and girls learn better in single-sex groups for certain subjects. It is also clear that young people benefit from interacting with both genders at all stages of their education and development. The Diamond Edge Model is where boys and girls are taught together until Year 6, then in Years 7-9 are taught separately in subjects where this is most beneficial and together in other subjects where mixed work is productive, before coming back together for Years 10-13 to study their chosen examination subjects for GCSE and A level. We believe that this offers the best of all worlds both socially and academically, allowing boys and girls to thrive and achieve their full potential.

Nursery School to Year 6

Our Nursery School currently has one class of children. There are two or three classes in all other year groups from Reception to Year 6. The curriculum is informed, but not constrained by the National Curriculum and the school chooses to enrich rather than accelerate learning. We are proactive in providing children with plentiful opportunities for self-discovery and make the most of the talented teaching from right across the



school. Children from Nursery School to Year 6 benefit from specialist teaching and facilities in our sports, science, art, design technology, music, languages and enhanced learning departments. Children in Years 5 and 6 are also taught by specialist mathematics teachers.

Years 7-9

Clifton High School is now well established in its delivery of the Diamond Edge Model of education. This model has proved to be highly popular amongst pupils and their parents, offering single-sex teaching when it is most beneficial, together with opportunities to interact socially amongst pupils and their parents.

Years 10-11: GCSE

Our pupils achieve superb examination results. A broad curriculum, small class sizes and excellent teaching are instrumental in this. At GCSE, pupils are encouraged to take nine subjects, including the separate sciences. They also have a comprehensive Life Skills and Competencies programme.

Sixth Form

Our Sixth Form is a centre of excellence within the School. Academic performance is high, both in terms of students achieving outstanding grades but also in terms of those who exceed expectations and do better than predicted. We offer a flexible and broad curriculum with courses running subject to demand; students may also complete an EPQ and have access to a full extra-curricular programme. All students follow the School's bespoke 'Futures and Skills Programme'; the support Clifton High students receive in terms of their UCAS applications is second to none. Typically, over 80% of students achieve their first choice of university.



co-educational nursery school to sixth form



Extra-curricular and Co-curricular

There are over 100 weekly extra-curricular clubs at Clifton High School ranging from Young Contrarians, Astronomy and Animation to Fencing, Drama and Taekwondo. The School actively encourages pupils to partake in activities to ensure a range of skills are being developed and individual talents are nurtured. The School welcomes many specialist coaches and has developed unique partnerships with outside sporting associations which provide our pupils with elite coaching and player pathways into participation up to international standard. Pupil performance in music and drama is exceptional. There are a wide range of musical ensembles to choose from and an annual school theatre production and school concert. The Junior School performs regularly in the Shakespeare Schools Festival.

International Pupils and Students

Clifton High School welcomes international pupils and students and operates a host-family boarding scheme for those students who are 16 or over. Bristol is home to large French-owned companies and, as such, has a growing population of French professionals. Clifton High School has met this need and is the only school in the South West that operates FECP, allowing French pupils to follow the French and English curriculum concurrently. Additional support is given from a well-structured English as an Additional Language (EAL) Department.



Departments Overview

Computing

The computing department at Clifton High School consists of two teachers, one of whom is shared with the Mathematics department. The facilities are fantastic, with a large scale refurbishment of IT equipment in August 2018 meaning the department's rooms are all equipped with Epson interactive projectors, 25 PCs (i5 7th or 8th generation) in each of the Senior computer rooms and access to a wide variety of equipment, software and online resources.

Pupils and staff have access to our school-wide Windows 10-based network giving access to a large number of ICT applications as well as a vast amount of subject specific software, including programming IDEs and the full Adobe CC suite. All staff and students have individual log-ins to the network, Outlook 365 e-mail access as well as confidential, personal work areas for storage including a Google Drive account. The department uses Google Classroom and a Parent Portal connecting information from our management system (SIMS) and accessible by students, staff and parents. Outside of school, access to the network for teachers is provided through a reliable Remote Desktop connection on Terminal Services, allowing full access to the on-site applications, drives and resources.

Pupils at KS3 study three strands of Computing – Digital Literacy, Computer Science and Information Technology. There are three lessons per fortnight for each year group, focusing on two large projects per year. In Year 7, pupils use Google Drive to collaborate, design and present on new technologies. They follow Computational thinking strands through to Year 9 where pupils undertake programming tasks in Python and use Flowol 4 to design algorithms with the help of Mimics. At GCSE, the department has strong numbers with nearly a third of Year 10s taking the subject. The A Level is new to the school, starting in September 2018. Pupils build on their Python skills, but also learn to program online applications in PHP, MySQL and JavaScript, and desktop applications in Visual Basic.

The department runs extra-curricular clubs during lunchtimes, including a Touch Typing club, Animation club and CoSpaces VR club. Pupils also follow the iDEA programme in Year 9, with many of our students achieving Bronze and Silver awards.



Mathematics

Mathematics is among the most popular subjects at A level, and we have a strong record of success at Further Mathematics A level. Our Mathematics Department is staffed by a talented team of teachers who, working together, deliver the very best in mathematics education. The aim is to ensure that boys and girls enjoy this all- important subject and are encouraged and challenged in their learning, making lessons interesting and enjoyable. The vast majority of our pupils achieve a grade 9-4, with that figure expected to be 100% for our current year 11. At A level 91% of students have achieved A* to B grades over the same period, with 100% achieving A* to C.

The Mathematics Department at Clifton High School consists of six teachers, one of whom is part time. In addition there is a dedicated Tutor of Mathematics in the Enhanced Learning Department who supports pupils' learning, both on a one-to-one basis and within mathematics lessons. We are a united and enthusiastic team who work together to foster an interest in and genuine enjoyment of Mathematics, whilst providing excellent teaching for academic success. The department has a wide range of subject expertise and an excellent record of examination success.

There are four dedicated Mathematics teaching rooms all with interactive whiteboards. There are also two IT suites which are regularly used by the department. The Mathematics Department office has very good facilities and can accommodate the whole department. This enables the informal discussions that facilitate the sharing of good practice in addition to regular department meetings. We are well resourced with practical equipment, subscriptions to web-based platforms including MyMaths, MathsWatch and MathsBox and a range of textbooks and other support material.

The Mathematics Department supplements classroom work with a range of additional activities. We enter pupils for the UKMT team and individual maths challenges at all levels. We offer lunchtime help sessions and puzzle clubs, as well as competing in the National Cipher Challenge run by Southampton University. For several years the department has also welcomed a Mathematics Ambassador undergraduate student from the University of Bristol who works with teachers and pupils on a weekly basis for one term.

Professional development is important and all members of the department have the opportunity to attend external courses to enhance their development. They are expected to share expertise gained from these courses with the rest of the department.



The School Ethos and Aims

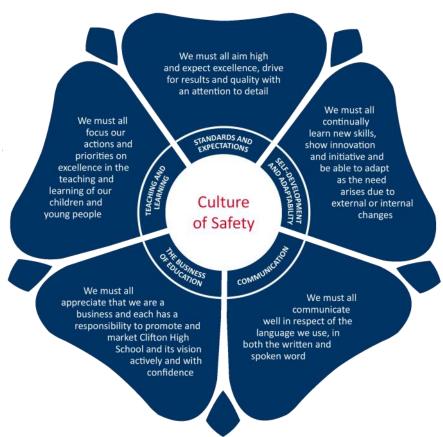
Our Ethos

We aim to produce young people with the ability to think independently, who have a strong belief in themselves, confidence to pursue their ambitions and the resilience, flexibility and adaptability to succeed whatever life presents.

Our Aim

At Clifton High School, our aims are based around five key areas:

- Teaching and Learning
- Standards and Expectations
- Self-development and Adaptability
- Communication
- Business of Education





JOB TITLE:	TEACHER OF COMPUTING AND MATHEMATICS			
DEPARTMENT:	COMPUTING/MATHEMATICS			
REPORTS TO:	SCHOOL CURRICULUM LEAD, DIGITAL LEARNING/HEAD OF MATHEMATICS			
1.	GENERAL QUALITIES			
	The Clifton High School teacher will be articulate and inspiring, confident, stable and supportive, highly able and innovative. She or he will have stamina, energy and drive, with the ability and determination to attain and maintain very high educational standards and to raise her or his pupils' standards of achievement to the very highest levels.			
	SAFEGUARDING			
	The Clifton High School teacher will be committed to Safeguarding and promoting the welfare of children and young people across this 3-18 School, both in and out of the School when in their charge and care. She or he will also ensure that any volunteers they have engaged to work with the children and young people are also committed to Safeguarding and are fully aware of the School's policies and procedures beforehand.			

2. MAIN RESPONSIBILITIES:

The teacher will demonstrate high levels of competence in the following areas:

PLANNING AND SETTING EXPECTATIONS

The teacher will be able to:

- Demonstrate an excellent ability to plan
- Prepare lessons and sequences of lessons with clear objectives to ensure successful learning by all pupils
- Set consistently high expectations for pupils in work completed in class and at home
- Plan her/his teaching to ensure it builds on the current and previous achievement of pupils
- Think creatively and imaginatively to anticipate and solve problems and to identify opportunities
- Make full use of the additional opportunities for curriculum enrichment in the wider school environment

TEACHING AND MANAGING PUPILS' LEARNING

The teacher will be able to:

- Demonstrate an excellent ability to teach, manage pupils and maintain discipline
- Understand and use the most effective teaching methods to achieve the teaching objectives in hand
- Display flair and creativity in engaging, enthusing and challenging groups of pupils
- Use questioning and explanations skilfully to secure maximum progress
- Quickly understand pupils' perceptions and misconceptions from their questions and responses
- Develop pupils' literacy, numeracy and ICT skills as appropriate within their phase and context
- Provide positive and targeted support for all pupils, including those who have special educational needs, are very able or lack confidence
- Maintain respect and discipline and be consistent and fair.

ASSESSMENT AND EVALUATION

The teacher will be able to:

- Demonstrate an excellent ability to assess and evaluate
- Use assessment as part of her/his teaching to diagnose pupils' needs
- Use assessment to set realistic and challenging targets for improvement
- Use assessment to plan future teaching.

PUPIL ACHIEVEMENT

The teacher will be able to:

- Demonstrate the ability to achieve excellent results and outcomes
- Demonstrate that, as a result of her/his teaching:
 - Pupils show consistent improvement in relation to prior and expected attainment
 - Pupils are highly motivated, enthusiastic and respond positively to challenge and high expectations
 - Pupils exhibit consistently high standards of discipline and behaviour.

3. KNOWLEDGE AND UNDERSTANDING:

The teacher will know and understand:

- What constitutes excellence in teaching and learning
- How to make use of recent research findings and theories about the different types of intelligence and how children and young people learn

She or he will have:

- Highly developed teaching skills
- Excellent subject knowledge
- Up-to-date knowledge of ICT and the new technologies, and will use them effectively to enrich her or his teaching and to improve learning.

4. COMMUNICATIONS:

RELATIONS WITH PARENTS AND THE WIDER COMMUNITY

The teacher will be able to:

Demonstrate a consistent record of positive parental involvement in learning and a generally high level of satisfaction.

5. **RESPONSIBILITY FOR:**

MANAGING OWN PERFORMANCE AND DEVELOPMENT

The teacher will be able to:

- Keep up-to-date in her or his subject(s) and/or specialism(s)
- Improve her or his teaching through evaluating her or his own practice in relation to pupils' progress, school targets and inspection/review evidence
- Achieve challenging professional goals
- Participate very effectively in professional development, taking responsibility for her or his own professional development.

MANAGING AND DEVELOPING STAFF AND OTHER ADULTS

The teacher will be able to:

- Provide clear feedback, good support and sound advice to others
- Analyse teaching and understand how improvements can be made
- Have highly developed interpersonal skills, which allow her or him to be effective in a wide range of learning situations.

MANAGING RESOURCES

The teacher will:

- Know how to plan and prioritise her or his own time and actions effectively
- Ensure that resources are used to their best advantage.

STRATEGIC LEADERSHIP

The teacher will:

- Provide a role model for pupils and other staff through her or his personal and professional conduct
- Be highly respected and able to motivate others.

TEACHING REQUIREMENT

A full time teacher at Clifton High School is currently required to teach 49 out of 60 periods per fortnight. Teachers are guaranteed 15% of their teaching time as non-contact time.

The duties and responsibilities highlighted in this Job Description are indicative and may vary over time. Post holders are expected to undertake other duties and responsibilities relevant to the nature, level and scope of the post.



PERSON SPECIFICATION

JOB TITLE:	TEACHER OF COMPUTING AND MATHEMATICS			
DEPARTMENT:	COMPUTING/MATHEMATICS			
REPORTS TO:	SCHOOL CURRICULUM LEAD, DIGITAL LEARNING/HEAD OF MATHEMATICS			
ASPECTS	Essential	Desirable	Assess by	
	Qualities which are essential to the satisfactory performance of the job and without which an applicant cannot be appointed	Qualities additional to those described as essential which may enhance your application. This is not an exhaustive list and you may add anything you feel is relevant to your application for the role.	AF = application form T = Teaching I = Interview	
Skills and Abilities	 Good interpersonal skills Ability to communicate effectively, both orally and in writing 		AF/T/I	
Knowledge	 High level ICT skills Excellent subject knowledge 			
Experience	 Proven experience of recent and successful teaching of the subject Ability to teach Computing to A level Ability to teach Mathematics to Year 9 			

PERSON SPECIFICATION

Qualifications and Professional Develop- ment	Relevant degree and QTS	AF/T/I
Personal competencies and qualities	 Commitment to own professional development Adaptable and flexible Ability to take responsibility and to show initiative Good team worker 	AF/T/I
Attitudes and Outlook	 Boundless energy and vision Ability to work under pressure and a capacity for hard work Ability to appreciate the needs of the whole school Positive and proactive approach to continuous improvement 	т/1